

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-23. (Canceled)

24. (Currently Amended) A method of providing information on, ~~in a method of analysis,~~
the likelihood of a result arising due to contamination, in a method of analysis: the method of
analysis including a threshold which determines the analysis protocol to be applied to the
analysis of DNA in a test sample;

the method of providing information ~~comprising~~ including:

in respect of one or more negative controls, obtaining information on whether
or not DNA is suggested as present in the negative controls;

determining the probability of DNA being suggested as present in the negative
controls, the determination being based on the number of the negative controls which
suggest DNA is present compared with the total number of negative controls
considered; and

the probability of DNA being ~~indicated~~ suggested as present in the negative
control being equated to the probability of the DNA samples being contaminated;

the method of providing information further including:

in respect of one or more DNA samples, obtaining information on whether or
not DNA is suggested as present in the DNA sample;

obtaining information about the quantity of DNA in ~~a DNA sample or negative~~
~~control~~ the one or more DNA samples;

in respect of one or more negative control samples, obtaining information on
whether or not DNA is suggested as present in the negative control;

obtaining information about the quantity of DNA in the one or more negative controls;

simulating one or more mixtures, the mixtures each being formed from a pairing of a negative control sample and a DNA sample taken from amongst the one or more negative ~~controls~~ control samples and the one or more DNA samples;

establishing the proportion of mixtures for one or both of the following types of simulated mixture: DNA ~~from contamination~~ suggested as present from negative control sample only; DNA suggested as present from both DNA sample and ~~contamination~~ negative control sample; and

determining a likelihood ratio in respect of a result arising which exceeds or which matches or exceeds the threshold in the method of analysis for one or both of the types of simulated mixture.

25. (Original) A method according to claim 24, wherein the information on possible errors is an indication as to the number of negative controls which contain a quantity of DNA above the threshold and / or the information on possible errors is an indication as to the number of contaminated samples which contain DNA above the threshold.

26. (Original) A method according to claim 24, wherein samples above or at and above the threshold are subjected to a first protocol and / or samples at and below or below the threshold are subjected to a second protocol.

27. (Original) A method according to claim 24, wherein a probability of achieving a given likelihood ratio is determined and such a determination is made in respect of one or more likelihood ratio levels and/or is made in respect of one or more threshold values.

28. (Original) A method according to claim 24, wherein the method includes varying the threshold to give a predetermined likelihood ratio and/or predetermined probability of achieving a likelihood ratio.

29. (Original) A method according to claim 24, wherein the method is applied independently to different operating organisations and/or different processing lines within organisations.

30-33. (Canceled)

34. (Original) A method of providing information on the contamination of DNA samples by persons involved in the processing of DNA samples, the method including:

determining DNA information of the same type as being analysed for in respect of one or more of the persons involved in processing the DNA samples;

determining the number of samples and/or negative controls contaminated by the one or more persons for whom the DNA information has been determined due to the detection of DNA information corresponding to their DNA information in samples and/or negative controls;

determining the proportion of samples and/or negative controls handled by such persons;

determining the proportion of persons for whom the DNA information has been determined compared with the total number of persons involved in processing the DNA samples.

35. (Original) A method according to claim 34, wherein the proportion of samples and/or negative controls contaminated is divided by the proportion of persons for whom the DNA information has been determined to give the total proportion of samples and/or negative controls contaminated by the total number of persons involved in the processing of the DNA samples.

36. (Original) A method of determining the threshold to be used within a method of analysis by an operating organisation to determine which analysis protocol to apply, the method comprising:

setting a threshold;

determining the likelihood ratio for false positives for that operating organisation with that threshold;

adjusting the value of the threshold ensure false positives do not exceed a desired likelihood ratio.

37. (New) A method according to claim 24 in which the method of providing information includes adjusting the level of the threshold to alter the number or proportion of negative controls on one or other side of the threshold.

38. (New) A method according to claim 24 in which the method of providing information includes adjusting the level of the threshold to reduce the number or proportion of negative controls above the threshold.